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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/718,455	11/19/2003	Neng-Yu Tseng	JCLA12114	9847

23900 7590 05/11/2006

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EXAMINER

NGUYEN, DONGHAI D

ART UNIT	PAPER NUMBER
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3729

DATE MAILED: 05/11/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/718,455	Applicant(s) TSENG ET AL.	
	Examiner Donghai D. Nguyen	Art Unit 3729	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) 4-6 and 9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-3, 7, 8, 10 and 11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. The amendment filed on 22 March 2006 has been considered and made of record.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-3, 7, 8 10 and 11 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The limitation “solidifying the frame sealant” (claim 1, line 8; claims 3 and 11; and claim 7, line 6) was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected to make or perform the step of solidifying the frame since it is uncertain as to whether the frame being liquid, gel, foam, or resin, etc material and how the frame is formed on the chip.

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

5. Claims 1-3, 7, 8 10 and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The “solidifying the frame sealant” (claim 1, line 8; claims 3 and 11; and claim 7, line 6) is incomplete since it is uncertain as to what material the frame made of and how the frame is formed in prior to the solidifying step.

Claim Rejections - 35 USC § 102

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) The invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1, 7 and 8 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 6,062,461 to Sparks et al.

Sparks et al disclose a frame attaching process comprising; forming the frame sealant (18, see Fig. 2) on the active area of the chip (10), the frame sealant surrounding the functional area (14); placing the transparent substrate (glass cap 12) and the chip in a vacuum system (Col. 5, lines 65-67) attaching the attaching surface of the transparent substrate (12) to the frame sealant formed on the active area of the chip under a negative pressure (see Col. 5, line 65 to Col. 6, line 2); and solidifying the frame sealant (see Col. 6, lines 3-6).

8. Claims 1, 3, 7, 8 and 11 as best understood are rejected under 35 U.S.C. 102(b) as being anticipated by US Patent 5,459,335 to Matsushita et al.

Matsushita et al disclose a frame attaching process comprising; forming the frame sealant (ultraviolet rays setting resin 13, see Fig. 7) on the active area of the chip (1), the frame sealant surrounding the functional area; placing the transparent substrate (glass cover 5) and the chip in a vacuum system (16, see Fig. 10) and attaching the attaching surface of the transparent substrate to the frame sealant formed on the active area of the chip under a negative pressure (see Fig. 10); and solidifying the frame (see Col. 6, lines 24-26).

The limitations of claims 3, 7, 8 and 11 also met as set forth above

Claim Rejections - 35 USC § 103

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 2 and 10 as best understood are rejected under 35 U.S.C. 103(a) as being unpatentable over Sparks et al or Matsushita et al.

Matsushita et al or Sparks et al does not disclose the specific operating range of atmosphere as recited in the above claims. It would have been obvious matter of design choice to one having ordinary skill in the art at the time the invention was made to choose the negative pressure ranges from about 0.5 to about 0.9 atmospheres, since it has been held that finding an optimum values of a result effective variable involves only routine skill in the art. Further, it

appears that the invention would perform equally with the atmosphere condition disclosed by either Sparks et al or Matsushita et al.

Response to Arguments

11. Applicant's arguments with respect to claims 1-3, 7-8 and 10-11 have been considered but are moot in view of the new ground(s) of rejection.

12. Applicant's arguments regarding rejected claims 1-3, 7-8 and 10-11 is acknowledged; however, the amendment to the claims has not overcome the 112 first and second paragraph. Because the claimed subject matter such as it is still not known the "frame sealant" is being incorporated in the claims and it is still unclear of how and when the frame sealant being formed and solidified (i.e., to make solid, compact or hard).

Further, Applicants argue that Spark does not teach the process of "bonding a chip and the substrate through a frame sealant under a negative pressure" (see "Remarks" bridged paragraph between pages 15-16). Note the teaching above can be found in Sparks' reference at Cols. 5-6, where the process of bonding a chip (10) and the substrate (12) through a frame sealant (18) under a negative pressure.

13. This application contains claims 4-6 and 9 are drawn to an invention nonelected without traverse in the Response filed on 10/12/05. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Conclusion

14. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Donghai D. Nguyen whose telephone number is (571)-272-4566. The examiner can normally be reached on Monday-Friday (9:00-6:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Peter D. Vo can be reached on (571)-272-4690. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3729

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DN

May 08, 2006


MINH TRINH
PRIMARY EXAMINER